

An encoder generates a TS packet of PSI and PCR in synchronization with reference signals generated by an STC reference signal generator and by a picture sequence reference signal generator. A switching TS of multiplexed packet is produced by encoding and packetizing the signals of pictures and voices. When a TS switch performs stream switching, a controller controls the encoder so that any stream having information is not transmitted. Encoding information amount and transmission information amount of packets are controlled. The transmission timing of a PCR packet is also controlled. A plurality of encoders performs similar processes in synchronization. The TS switch switches switching TS's, forming a single output TS, without introducing transients and characteristic degradation.